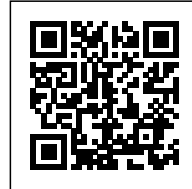




INSECT SPECTACLES

Posted on November 19, 2015 by Urban UrbanNext



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Fascinated by human interactions with things that are invisible and very difficult to approach.



Chris Wuebken *The flea circuses were in Copenhagen. They featured tiny machines built for insects, including devices designed for fleas. There was a bike and a carousel, and someone could actually operate the flea circus.*

When I was doing that research, though, I also stumbled upon some things that DARPA has been doing, working with the idea of using animals as biosensors. I especially like looking into insects and their “superpowers”—the moth has a superpower to detect pheromones, for example, and you can actually train them. So the military—DARPA—is doing research now where they train moths to do things like detect explosives. What they do is they hook electrodes up to the antennae of a moth and they can



make it react—instead of male-to-female or female-to-male—they can twist the pheromone communication, using sugar water, so that the moths will look for explosives.

That process was really intriguing to me.

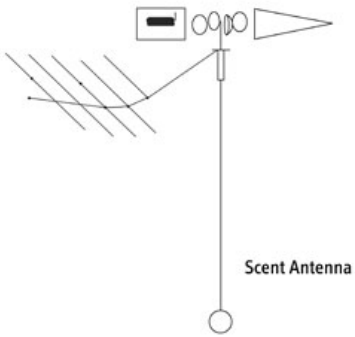
I have also been reading about this thing called a beetle controller, where you can control a beetle with lights. There was another lab I went to that had a flight simulator for insects, looking at new types of Pavlovian training for insects.

After seeing all that, I started to wonder what would happen if you could have products that actually facilitate interaction with insects in your home, or that made insects accessible to people who want to keep insects as pets.

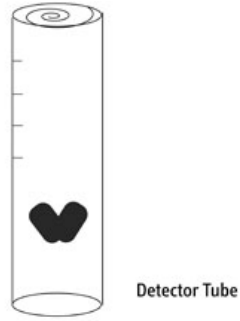
I'm trying to understand how you can interact with insects on a different level—how you can use their superpowers to create sensors that don't just allow you to use them in a military sense, but for other projects.

I'm trying to understand how you can interact with insects on a different level—how you can use their superpowers to create sensors that don't just allow you to use them in a military sense, but for other projects... What would that look like? What kind of products could you build?

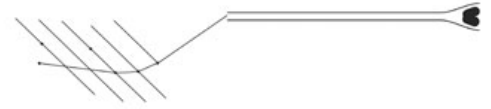
How would that interaction work? What would people use it for?



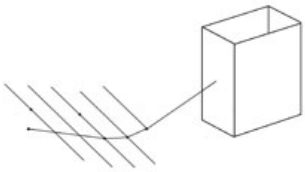
Scent Antenna



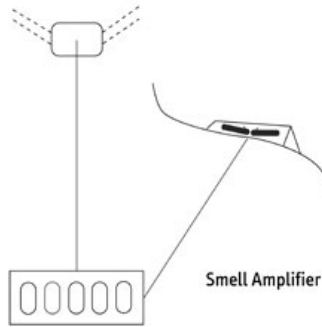
Detector Tube



Olfactory Rod



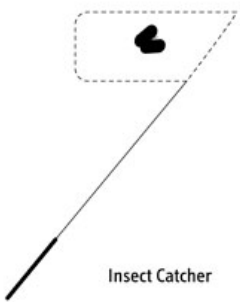
Human Phantom Trainer



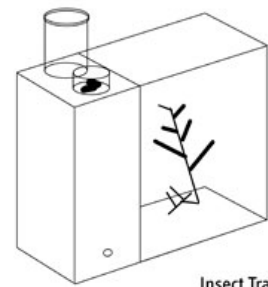
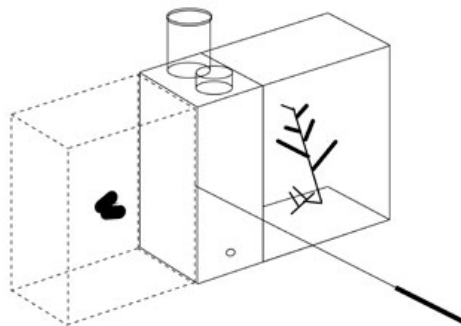
Smell Amplifier



Insect Launching



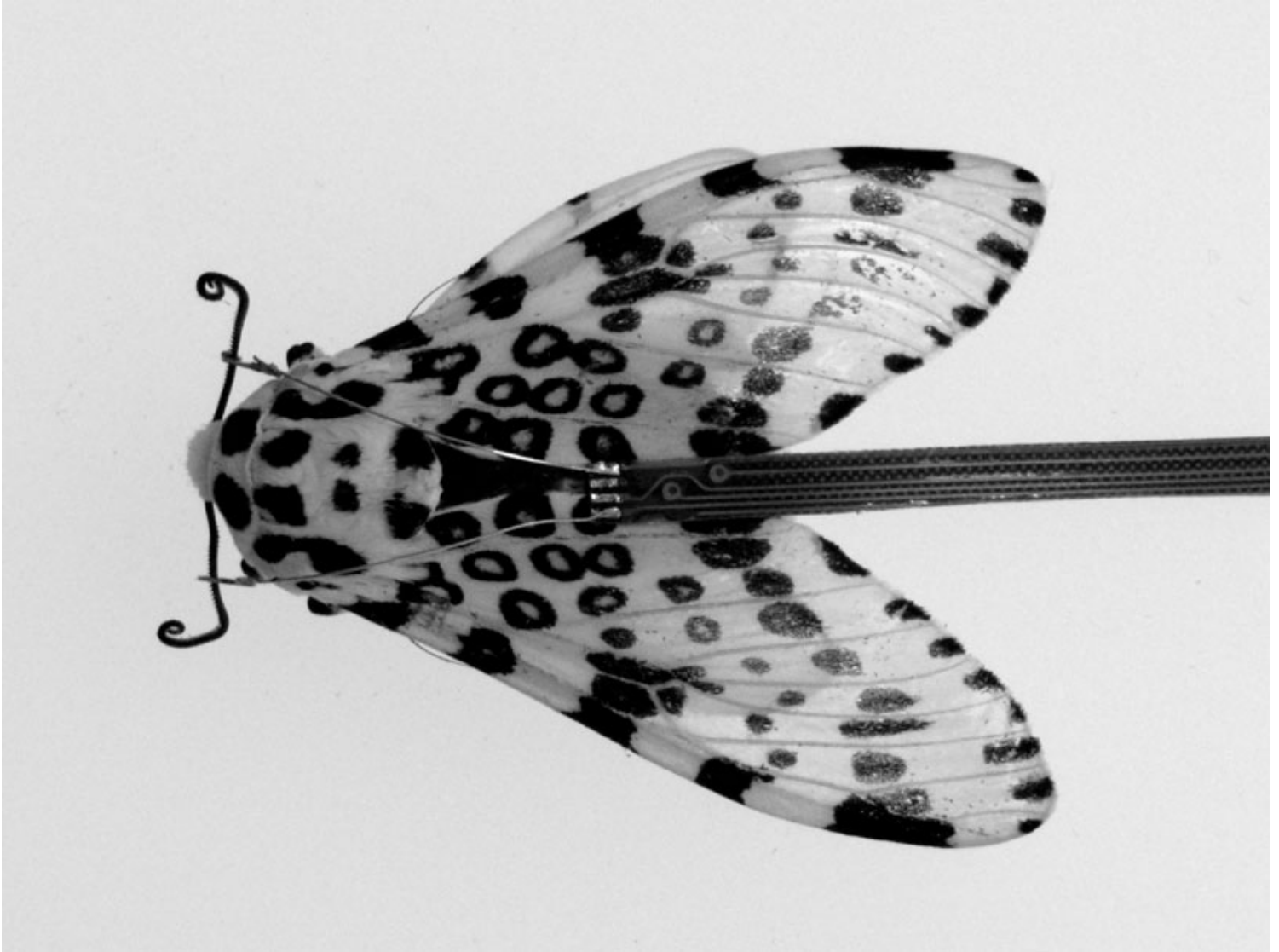
Insect Catcher



Insect Training Habitat



Moth Device Diagrams



Moth Device



Moth Device



Moth Device

Describing his 2008 project Moth, Chris Woebken writes that "insects are easy to train, very robust, have almost robotic strength, and can be bred at very low cost... The insect-as-sensor can become an entity of trust—rather than something you might shy away from or even be repulsed by."



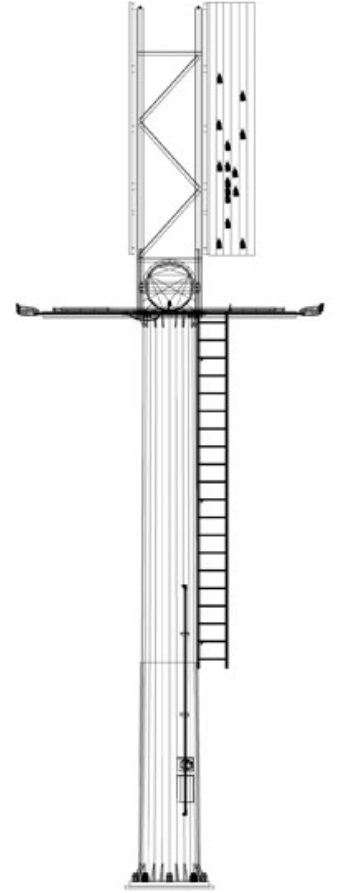
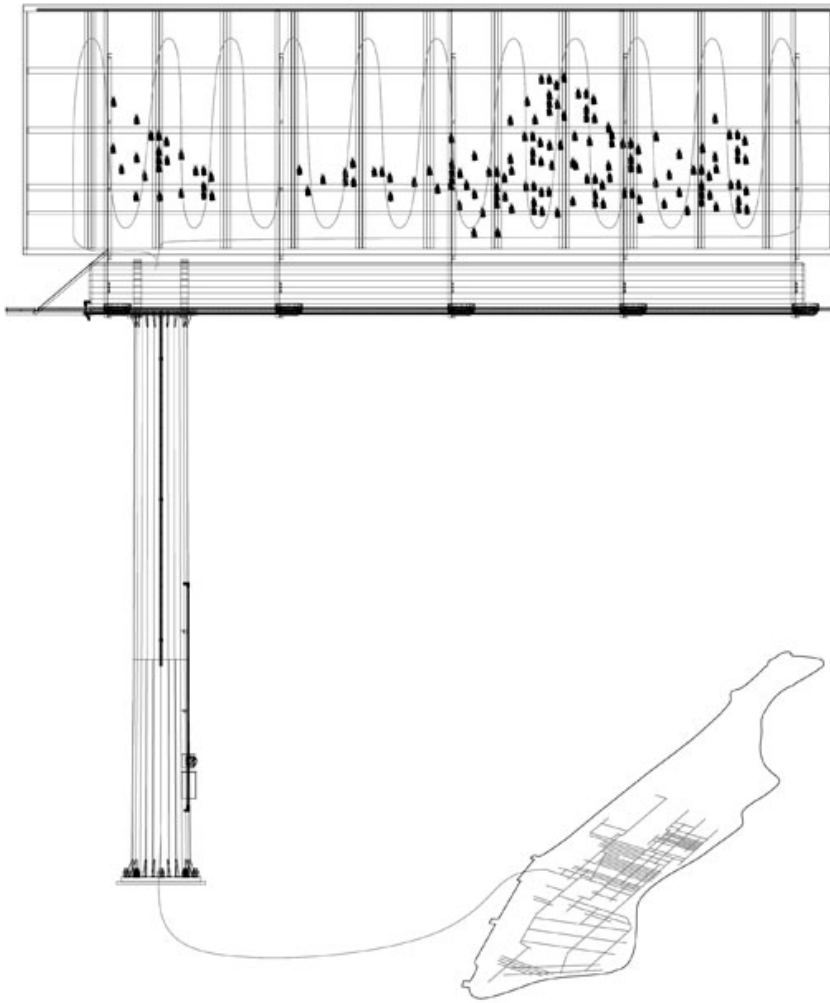
Ant Device



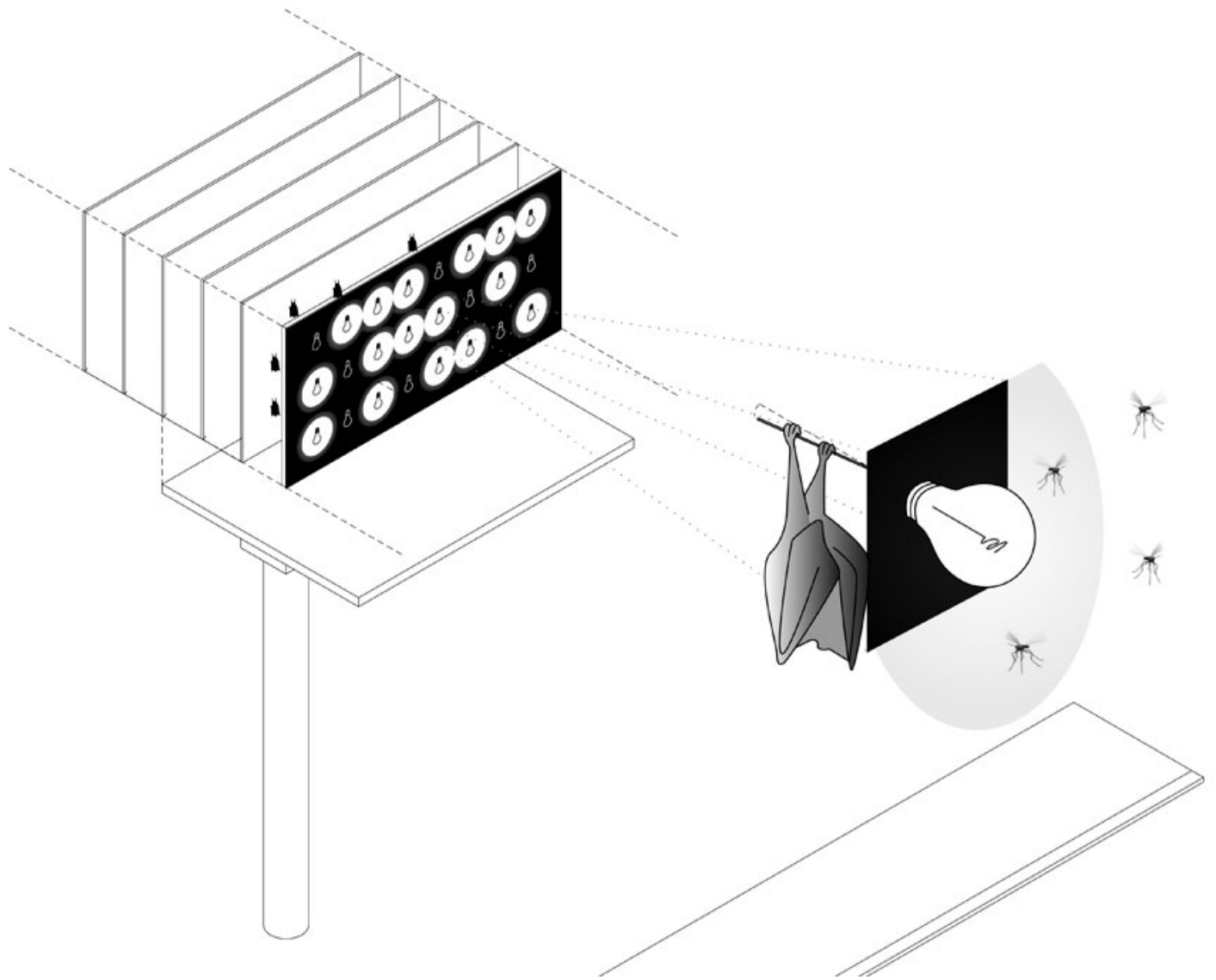
Ant Device. Installation at the Nevada Museum of Art by Geoff Manaugh.



Giraffe Device. Installation at the Nevada Museum of Art by Geoff Manaugh.



Bat Billboard



Bat Billboard



Bat Billboard



Beetle Wrestler



Beetle Wrestler



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Bird House



Bird House

Chris Woebken's numerous collaborations have included explorations of animal superpowers, "beetle wrestling," and other wearable prosthetics, combining playful costumes with new interactive technologies.

Extract from



Related publications:

[Bracket 1](#)

[Bracket 2](#)

